WHAT IS CLAIMED IS:

Sub a1

1. ~~A liquid crystal panel driving method for a liquid crystal panel having~~ a liquid crystal between a pair of electrodes in which optical characteristics of the liquid crystal are changed by applying a driving signal between the pair of electrodes, the liquid crystal panel driving method comprising the steps of:

sensing a temperature of at least one of the liquid crystal panel and an environment in which the liquid crystal panel is disposed; and

applying a low frequency signal as the driving signal at a low temperature based on the sensed temperature, the low frequency signal being lower than a frequency signal used at normal temperature.

2. The liquid crystal panel driving method according to claim 1, further comprising applying a high frequency signal as the driving signal at a high temperature based on the sensed temperature, the high frequency signal being higher ~~than the frequency signal used at the~~ normal temperature.

3. The liquid crystal panel driving method according to claim 1, further comprising varying a frequency of the driving signal discontinuously with respect to the sensed temperature.

4. The liquid crystal panel driving method according to claim 3, further comprising varying a frame frequency obtained when performing time-division driving of a plurality of pixels arranged in a matrix form on the liquid crystal panel, based on the sensed temperature, so that at least a frequency corresponding to an integer multiple of 50 Hz is avoided.

5. The liquid crystal panel driving method according to claim 3, further comprising varying a frame frequency obtained when performing time-division driving of a plurality of pixels arranged in a matrix form on the liquid crystal panel, based on the sensed temperature, so that at least a frequency corresponding to an integer multiple of 60 Hz is avoided.

6. The liquid crystal panel driving method according to claim 5, further comprising setting a driving frequency of each pixel of the liquid crystal panel so that, when the temperature is -20 °C, each pixel is driven at a frequency not greater than 1.28 kHz, and, when the temperature is +25 °C, each pixel is driven at a frequency not greater than 2.56 kHz.

7. The liquid crystal panel driving method according to claim 6, further comprising setting the driving frequency of each pixel of the liquid crystal panel so that, when the temperature is +70 °C, each pixel is driven at a frequency not greater than 4.16 kHz.

8. The liquid crystal panel driving method according to claim 7, further comprising setting the frame frequency to not greater than 40 Hz when the temperature is -20 °C, setting the frame frequency in the range of 70 Hz to 90 Hz when the temperature is +25 °C, and setting the frame frequency to not less than 130 Hz when the temperature is +70 °C.

Sub a2

9. A liquid crystal device comprising a liquid crystal panel having a liquid crystal between a pair of substrates and a driving circuit that applies a driving signal between the pair of substrates and that varies optical characteristics of the liquid crystal, the liquid crystal device further comprising:

a temperature sensor that senses a temperature of at least one of the liquid crystal panel and an environment in which the liquid crystal panel is disposed; and

temperature compensating device that applies a low frequency signal as the driving signal at a low temperature based on the sensed temperature obtained by the temperature sensor, the low frequency signal being lower than a frequency signal used at the normal temperature.

10. The liquid crystal device according to claim 9, the temperature compensating device applying a high frequency signal as the driving signal at a high temperature, the high frequency signal being higher than the frequency signal used at the normal temperature.

11. The liquid crystal device according to claim 9, the temperature compensating device discontinuously varying a frequency of the driving signal with respect to the sensed temperature.

12. The liquid crystal device according to claim 11, wherein the temperature compensating device varying a frame frequency obtained when performing time-division driving of a plurality of pixels arranged in a matrix form on the liquid crystal panel, based on the sensed temperature, so that at least a frequency corresponding to an integer multiple of 50 Hz is avoided.

13. The liquid crystal device according to claim 11, wherein the temperature compensating device varying a frame frequency obtained when performing time-division driving of a plurality of pixels arranged in a matrix form on the liquid crystal panel, based on the sensed temperature, so that at least a frequency corresponding to an integer multiple of 60 Hz is avoided.

14. The liquid crystal device according to claim 13, when varying the frame frequency while avoiding a specific frequency, the temperature compensating device varying the frame frequency in a hysteretic manner.

15. The liquid crystal device according to claim 14, the temperature compensating device avoiding a specific frequency and varying the frame frequency in accordance with the sensed temperature by varying the frame frequency in a stepwise manner.

16. The liquid crystal device according to claim 15, the temperature compensating device continuously varying the frame frequency in accordance with the sensed temperature except when the frame frequency is varied while avoiding a specific frequency.

17. The liquid crystal device according to claim 9, the temperature compensating device setting a driving frequency of each pixel of the liquid crystal panel to not greater than 1.28 kHz when the temperature is -20 °C and to not greater than 2.56 kHz when the temperature is +25 °C.

18. The liquid crystal device according to claim 17, the temperature compensating device setting the driving frequency of each pixel of the liquid crystal panel to not greater than 4.16 kHz when the temperature is +70 °C.

19. The liquid crystal device according to claim 12, the temperature compensating device setting the frame frequency to not greater than 40 Hz when the temperature is -20 °C, setting the frame frequency in the range of 70 Hz to 90 Hz when the temperature is +25 °C, and setting the frame frequency to not less than 130 Hz when the temperature is +70 °C.

20. The liquid crystal device according to claim 9, the temperature compensating device is a synchronizing signal frequency varying device that varies a frequency of the driving signal by varying a frequency of a synchronizing signal applied to a liquid crystal drive control circuit for controlling the driving circuit based on the sensed temperature.

21. The liquid crystal device according to claim 9, the temperature sensor being a thermistor formed together with the driving circuit in a semiconductor device.

Sub a3

22. An electronic apparatus comprising the liquid crystal device as set forth in claims 21 as a display device.